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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/036,819	03/09/1998	A. SAID EL SHAMI	107-145D-C	6406

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EXAMINER

DEVI, SARVAMANGALA J N

ART UNIT	PAPER NUMBER
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1645

DATE MAILED: 09/17/2002

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/036,819

Applicant(s)

El Shami

Examiner

S. Devi, Ph.D.

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 2, 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 55 is/~~are~~ pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 55 is/~~are~~ rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

RESPONSE TO APPLICANT'S AMENDMENT

Applicant's Amendment

- 1) Acknowledgment is made of Applicant's amendment filed 07/02/02 (paper no. 22) in response to the non-final Office Action mailed 04/19/02 (paper no. 21).

Status of Claims

- 2) Claim 54 has been canceled via the amendment filed 07/02/02.
Claim 55 has been added via the amendment filed 07/02/02.
Claim 55 is pending and is under examination.

Prior Citation of Title 35 Sections

- 3) The text of those sections of Title 35 U.S. Code not included in this action can be found in a prior Office Action.

Prior Citation of References

- 4) The references cited or used as prior art in support of one or more rejections in the instant Office Action and not included on an attached form PTO-892 or form PTO-1449 have been previously cited and made of record.

Objection(s) Maintained

- 5) The objection to the specification made in paragraph 5(b) of the Office Action mailed 02/04/99 (paper no. 4) and maintained in paragraph 8 of the final Office Action mailed 06/24/99 (paper no. 6) and paragraph 7 of the Office Action mailed 04/19/02 (paper no. 21) is maintained for reasons set forth therein.

Rejection(s) Moot

- 6) The rejection of claim 54 made in paragraph 8 of the Office Action mailed 09/04/01 (paper no. 16) under 35 U.S.C. 112, first paragraph, as containing new matter, is moot in light of Applicant's cancellation of the claim.
- 7) The rejection of claim 54 made in paragraph 9(c) of the Office Action mailed 09/04/01 (paper no. 16) and maintained in paragraph 10 of the Office Action mailed 04/19/02 (paper no. 21) under 35 U.S.C. § 112, second paragraph, as being indefinite, is moot in light of Applicant's cancellation of the claim.

Serial Number 09/036,819
Art Unit: 1645

8) The rejection of claim 54 made in paragraph 11 of the Office Action mailed 04/19/02 (paper no. 21) under 35 U.S.C. § 112, second paragraph, as being indefinite, is moot in light of Applicant's cancellation of the claim.

9) The rejection of claim 54 made in paragraph 12 of the Office Action mailed 04/19/02 (paper no. 21) under 35 U.S.C. § 103 over the Interference count of Interference no. 101,933, is moot in light of Applicant's cancellation of the claim.

10) The rejection of claim 54 made in paragraph 13 of the Office Action mailed 04/19/02 (paper no. 21) under 35 U.S.C. § 102(b)/103 based upon the public use or sale of the invention, i.e., Salicylate Kits and Immunoassay Kits, is moot in light of Applicant's cancellation of the claim.

Response to Applicant's Arguments

11) With regard to the recitation "displacing testosterone" in the last two lines of claim 55, Applicant states that this refers to 'the portion of testosterone bound to one or more endogenous binders'. Applicant's statement verifies that the recitation 'without displacing testosterone bound to said endogenous binders' in the last two lines of the claim lacks proper antecedent basis, because line 3 of claim 55 already recites 'another portion of testosterone bound to one or more endogenous binders'. See paragraph 12 below.

Applicant contends that the 'italicized words in paragraph 9' of the Office Action are found in the Interference Count. However, there were no 'italicized' words provided in paragraph 9 of the last/recent Office Action. In addition, paragraph 9 of the Office Action mailed 04/19/02 was related to amended claim 54, but not 'amended claim 55'. Applicant further contends that the nexus between these (italicized) words and the specification disclosure of the specific species of 'amended claim 55' was explained in Applicant's communication filed 15 March 2002, but was not commented on by the Examiner. However, the amendment filed 03/15/02 did not provide descriptive support for the limitation: "insufficient to substantially affect".

With regard to the rejection of claim 54 made in paragraph 12 of the Office Action mailed 04/19/02 over the Interference Count, Applicant acknowledges that claim 54 is subgeneric to the count, but argues that this does not make claim 54 or the new claim 55 obvious

Serial Number 09/036,819
Art Unit: 1645

over the count of Interference No. 101,933, because a species is patentable over a prior known genus. Applicant further contends that claim 55 is a very preferred embodiment based upon a combination of recited active ingredients and that the combination was not anywhere involved in the Interference, i.e., claims 1-27 of the application SN 06/784,857. Applicant also argues that the combination was not presented or involved in the Appeal of the Board of Patent Appeals and Interferences in the parent application SN 07/303,712 wherein the Board affirmed the rejection of other and different claims in its decision dated 09 January 1998. Applicant contends that the Interference and subsequent Appeal are irrelevant to claim 55 because it was not presented on the Appeal and was not and could not have been presented in the Interference.

In response, claim 1 of the prior patent application SN 06/784,857 encompassed a method which indeed used a combination of substances: ligand; a specific ligand binder; a labeled analog; and an inhibitor or blocking agent. Specific species were covered in the dependent claims: the ligand species 'testosterone' in claim 17; 'specific antibody binder' species in claim 10; specific 'labeled analog' species in claim 18; and the specific blocking agent species 'sulFOBromophthalein' in claim 23. Claims 1-27 of the prior application SN 06/784,857 corresponded to the count of the interference No. 101,933. Therefore, the Interference is very relevant to the instant claim 55 which encompasses the above identified species and the combination. A similar rejection based on the lost Interference Count was made in the parent case, SN 07/303,712, and was affirmed by the Board is relevant. In this prior application SN 07/303,712, claim 32 included the "sulFOBromophthalein" blocking agent species and claim 34 included the "testosterone ligand" species. In affirming the Examiner's rejection via the Decision mailed 01/09/1998, the Board noted the Appellant's acknowledgment that his claims, i.e., claims 28-34 in SN 07/303,712, were subgeneric to the count. The Board also noted in the parent application that when an Applicant has conceded that he/she is not entitled to a patent for the subject matter embraced in the interference counts, claims thereafter presented must be "inventive different" from the interference counts. *In re Cole*, 82 F.2d 405, 407, 29 USPQ 137, 139 (CCPA 1936); citing, *In re Dodge*, 74 F.2d 756, 757-758, 24 USPQ 219, 229 (CCPA 1935). By Applicants' own previous account or acknowledgment and the Board's decision on the prior application with similar claims, it is apparent that the subject matter of the instant claim 55 does

Serial Number 09/036,819
Art Unit: 1645

not differ from that of the interference count.

New Rejection(s)

Applicant is asked to note the following new rejections made in this Office. The new rejections are necessitated by Applicant's amendment i.e., the submission of a new claim.

Rejection(s) under 35 U.S.C § 112, First Paragraph

12) Claim 55 is rejected under 35 U.S.C § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

Claim 55 includes the following new limitation as shown below in bold:

55. A method for determining the concentration of the free portion of testosterone ligand in a biological fluid, wherein said free testosterone is in equilibrium with another portion of the testosterone bound to one or more endogenous binders in said fluid comprising the steps of (a) forming a mixture of a sample of said fluid with (1) an amount of a specific antibody for the free testosterone **insufficient to substantially affect** said equilibrium, and (2) a labeled analog of testosterone which is radioiodinated 6-hydroxy-testosterone-19-carboxymethyl ether histamine that binds to said antibody and has affinity for the endogenous binders lower than that of testosterone for said endogenous binders, (b) maintaining said mixture to permit said labeled derivative to compete with the free testosterone for binding with the antibody, (c) measuring the amount of said labeled analog that has, or has not, become bound to the antibody, and (d) determining the concentration of the free testosterone from said measurement, wherein the improvement comprises including in the mixture an amount of a blocking agent which is sulfobromophthalein to inhibit the binding of said labeled analog to the endogenous binders without displacing testosterone bound to said endogenous binders.

However, there appears to be no descriptive support in the instant specification for this added limitation. Neither the amendment filed 03/15/02, nor the amendment filed 07/02/02 points to a specific part of the specification that provides descriptive support for the above-identified limitation. Therefore, the new limitation in the claims are considered to be new matter. *In re Rasmussen*, 650 F.2d 1212 (CCPA, 1981). New matter includes not only the addition of wholly unsupported subject matter but also, adding specific percentages or compounds after a broader original disclosure, or even omission of a step from a method. See M.P.E.P. 608.04 to 608.04(c).

Applicant is respectfully requested to point to the descriptive support in specific part(s) of the disclosure as filed, for the newly added limitation, or to remove the new matter from the claim.

Rejection(s) under 35 U.S.C § 112, Second Paragraph

13) Claim 55 is rejected under 35 U.S.C § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

(a) Claim 55 lacks proper antecedent basis for the recitation “displacing testosterone bound to said endogenous binders” (see lines 14 and 15 of the claim). Since there is already a recitation in the earlier part of claim 55 of “another portion of testosterone bound to one or more endogenous binders” (see line 3), is the recitation “testosterone bound to said endogenous binders” in lines 14 and 15 of the claim different from the one recited in line 3 of the claim?

(b) Claim 55 is confusing in the recitation “the free portion of testosterone” (see line 1) and “the free testosterone”, because it is unclear how the former limitation differs from the latter both in meaning and in scope.

Rejection Based on the Lost Interference Count

14) In accordance with the practice set out in M.P.E.P 2363, claim 55 is rejected under 35 U.S.C § 103 as being unpatentable over the count of Interference no. 101,933.

The count 1 of Interference no. 101,933 is provided below:

In a method of determining the concentration of a free portion of a ligand in a biological fluid, wherein said free ligand is in equilibrium with another portion of the ligand bound to one or more endogenous binders in said fluid comprising the steps of (a) forming a mixture of a sample of said fluid with (1) an amount of a specific binder for the free ligand insufficient to substantially affect said equilibrium, and (2) a labeled derivative of the ligand that binds to said specific binder and has affinity for the endogenous binders lower than that of the ligand for said endogenous binders, (b) maintained said mixture to permit the ligand derivative to compete with the free ligand for binding with the specific binder, (c) measuring the amount of ligand derivative that has, or has not, become bound to the specific binder, and (d) determining the concentration of said free ligand from said measurement, wherein the improvement comprises including in the mixture an amount of a blocking agent which substantially reduces the binding of the ligand derivative to the endogenous binders without substantially reducing the binding of the ligand to said endogenous binders.

The count clearly embraces the use of a specific binding ligand in a method of determining or measuring the concentration of any free ligand in a biological fluid. The free ligand, the specific ligand binder and the blocking agent recited in the count are inclusive of the subgenus ligand, testosterone; the subgenus specific ligand binder, antibody; and the subgenus blocking agent, sulfobromophthalein. The labeled analog now included in claim 55 is subgeneric to the labeled derivative recited in the count. Therefore, the instant claim 55 is unpatentable or obvious over the count of Interference no. 103,933.

Serial Number 09/036,819
Art Unit: 1645

It is noted that a similar rejection made in the parent case, SN 07/303,712, was affirmed by the Board. In this prior application SN 07/303,712, claim 32 included all the limitations of the base claim and the “sulfobromophthalein” blocking agent species, and claim 34 included all the limitations of the base claim and the “testosterone ligand” species. In affirming the Examiner’s rejection via the Decision mailed 01/09/1998, the Board noted the Appellant’s acknowledgment that his claims, i.e., claims 28-34 in SN 07/303,712, were subgeneric to the count. The Board also noted in the parent application that when an Applicant has conceded that he/she is not entitled to a patent for the subject matter embraced in the interference counts, claims thereafter presented must be “inventive different” from the interference counts. *In re Cole*, 82 F.2d 405, 407, 29 USPQ 137, 139 (CCPA 1936); citing, *In re Dodge*, 74 F.2d 756, 757-758, 24 USPQ 219, 229 (CCPA 1935). By Applicants’ own previous account or acknowledgment, and the Board’s decision, it is apparent that the subject matter of instant claim 55 is not ‘inventive different’ from that of the interference count.

The instant application SN 09/036,819 is a continuation of SN 07/303,712, which in turn is a Divisional of application SN 06/784,857. It is noted that a judgment adverse to El Shami was rendered by the Board of Patent Appeals and Interferences in application SN 06/784,857, claim 18 of which included the “iodinated 6-hydroxytestosterone-19-carboxymethyl ether histamine analog” species; claim 17 of which included the “testosterone ligand” species; claim 10 of which included the “antibody” species to the free ligand; and claim 23 of which included the “sulfobromophthalein” blocking agent species. It is further noted that claims 1-27 of the application SN 06/784,857 corresponded to the count of the Interference No. 101,933.

Relevant Prior Art

15) The prior art made of record and not relied upon in any of the rejections is considered pertinent to Applicant’s disclosure:

- Felicetta *et al.* (*J. Clin. Endocrinol. Metabolism* 57: 207-212, 1983, already of record) teach the use of sulfobromophthalein (BSP) as a blocking agent which displaces a ligand bound to serum proteins (see entire document).

16) The Applicants’ amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Serial Number 09/036,819
Art Unit: 1645

Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


17) Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Fax Center located in Crystal Mall 1. The transmission of such papers by facsimile must conform with the notice published in the Official Gazette, 1096 OG 30, November 15, 1989. The CM1 facsimile center's telephone number is (703) 308-4242, which is able to receive transmissions 24 hours a day and 7 days a week. The RightFax number for submission of before-final amendments is (703) 872-9306. The RightFax number for submission of after-final amendments is (703) 872-9307.

18) Any inquiry concerning this communication or earlier communications from the Examiner should be directed to S. Devi, Ph.D., whose telephone number is (703) 308-9347. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 7.15 a.m. to 4.15 p.m. except one day each bi-week, which would be disclosed on the Examiner's voice mail system.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lynette Smith, can be reached on (703) 308-3909.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

September, 2002


S. DEVI, PH.D.
PRIMARY EXAMINER
Septem-02